

The Effectiveness of Problem-Solving Teaching with Two Methods of Group Games and Group Storytelling on the Slow-Learning Students' Social Skills

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Abstract

The purpose of this study is to investigate the effectiveness of problem solving teaching with two methods of group games and group storytelling on the slow-learning students' social skills. For this purpose, 32 under 14 years old slow-learning students in Tehran were selected by available sampling. The sample group was randomly divided into two experimental groups with 8 subjects and one control group with 8 subjects. The Social Skills Inventory of Truscott (1989) was used to collect data. This was a quasi-experimental study with pre-test - post-test design. In each of the experimental groups, one of two methods of problem solving teaching namely, group storytelling and group games was conducted in one-hour 10 sessions and control group received no training. Inferential analysis of data was done by covariance methods and multivariate analysis of variance. The results showed a significant difference in scores of pre-test - post-test of experimental and control groups in subscales of social skills, lack of social competence and communication with peers. In other words, the problem solving teaching by two methods of group games and group storytelling has a positive effect on increasing social skills of slow learner students.

Keywords: problem solving, group storytelling, group games, social skills, slow-learning students.

Introduction

The onset of thinking about social skills as an important field of study is relatively a new event for child clinical psychologists, school psychologists, developmental psychologists, special educators, child psychiatrists, social workers and other professionals. Since social skills are introduced as a subject of study, a real explosion is occurred in research and increasingly aware regarding the importance of the scientific area in clinical and applied studies is observed. In this regard, psychology and psychiatry journals have devoted multiple numbers of publications to this subject for all age groups and sometimes on different groups of people with intellectual disabilities or people with learning disabilities are concentrated. All these advances suggest that in the present, social skills are seen as an issue and also imply that in the coming years, it will leave effective impact on the study of children (Zarei Dehseraji, 2012).

One of the major goals of education of mental disabled children is creating adaptive behavior. This adaptation does not include matching or absolute obedience in front of applying power, but it is the ability of individual in compromising with unsupervised situations and leading others. This compromise refers to the behavior that helps individual to adapt with situations with the least amount of inner anxiety and a behavior that increases a person's growth. According to the literature review of children who lack social skills, they demonstrate the negative consequences resulting from it in short-term and long-term in a way that it leads to the severe problems for them in

adolescence and adulthood (Arjmandi, 2002). Hence, to enhance social skills and adaptability in children especially in slow learner students, multiple programs such as problem solving skill training are applied. People who are not able to solve problem when dealing with obstacles may exhibit impulsive behaviors, feel failure, be aggressive or to avoid problematic situations may be dissociable. Repetition of such experiences could lead to non-adaptive behaviors (Taheri, 2011).

Lack of problem-solving ability in dealing with interpersonal problems can cause impulsive behavior, aggression, isolation, a sense of frustration and non-adaptive behavior in children. On the other hand, in mental disabled children, the existence of cognitive deficits and failure of social skills influence the impulse control and behavioral adjustment. Hence, problem solving skills training seems necessary. Therefore, the use of therapies in reducing behavioral problems can be very important. Some of these methods that are used to reduce behavioral problems and improve communication skills of children include training in the form of games, storytelling and theater (Malek, Hasanzadeh, Tirgiri, 2012). On the other hand, story is known as a rich source and creative, easy and enjoyable tool for training. According to Bandura's theory, through vicarious experience of the hero of story, child begins to simulation and analyzes the consequences of behavior and then applies it as a benchmarking. That's why by using the literature and story valuable skills can be taught to children in various social fields (Tahmasian, 2006). On the other hand, children during games, especially educational games reach to a new mental concepts and acquire more and better skills. Researchers believe that when training to be done on the right time and based on the selection of appropriate activity, education of every child with any talent and ability is possible (Angaji & Asgari, 2011).

Since the mental health of all people of society, especially children to have a healthy and growing community is important, especial attention should be paid to this matter in any way. If children do not have problem solving ability, they may make problem more complex and greater by applying immature, useless and harmful solutions. Therefore, the necessary social skills training, especially the training problem solving skills arises in one's life. Therefore, the necessary of social skills training, especially problem solving skills training arises in one's life. That is how to attend in community and exhibit acceptable and appropriate group behaviors. The issue of social skills of children is a part of their socialization matter and socialization is a process in which norms, skills, motivations and attitudes and behavior of individual are shaped (Souleymani, 2009). Thus, according to the role of two therapy methods of group game and group storytelling in problem solving training with aim of improving the social skills of children, especially slow learning children, the present study seek to identify the effectiveness of problem solving training by two methods of group storytelling and group game on social skills of slow-learning students.

Methodology

This was a quasi-experimental study with pretest - posttest design and control group. The study population consisted of all under 14 years old slow learning students in Tehran. In this study, 32 slow learning students were selected by available sampling method. The average age of sample group was 9 years old, with minimum of 7 and maximum of 12 years old and with average IQ of 78. The sample group by random sampling method was placed into two experimental groups of group storytelling and group game (each $n = 8$) and a control group ($n=8$).

The social skills questionnaire of Truscott (1989) with 56 questions was used as a research tool. This questionnaire is one of the sub-scales of 600 phrases questionnaire of characteristic of children (Wirth, Lakhr, Cleandinset and Wiset, 1984). Its subscales are lack of social competence, social skill and peer relationships that each of them has separate usability.

In this study, in social skills questionnaire of Truscott, the Cronbach's alpha coefficient for sub-scales of lack of social competence, social skills and peer relationship with each other was obtained as 0.785, 0.81 and 0.85 respectively and on the basis of variables and using Cronbach's alpha coefficient, the reliability of the whole questionnaire was obtained 0.860. Since the amount of Cronbach's alpha was greater than 0.7, the reliability of test was acceptable.

Findings of the study

Descriptive indicators of social skills test scores and subscale of social skill, social competence and relationship with peers were calculated in slow learning students in two experimental and control groups in the pre-test and post-test stages and the results are presented in Table 1. Results of Table 1 indicate that in pre-test stages, there is a little difference between mean of total social skills and subscales of the lack of social competence, social skill and relationship with peers in both experimental and control groups, but in the posttest stages, there is a difference between mean of total social skills and its subscales in both experimental and control groups, so that the mean scores of total social skills and its subscales in the experimental group is decreased compared to the control group.

Table 1: Descriptive indicators of scores of social skills

Group	Variables	Number	Pre-test mean	SD	Post-test mean	SD
Play Therapy	Total social skills	8	26.88	13.03	13.50	5.24
	social skill	8	16.00	8.72	8.38	3.89
	Social competence	8	15.88	8.32	9.38	4.78
	Relationship with peers	8	4.63	3.20	1.75	0.89
Narrative therapy	Total social skill	8	28.25	5.55	13.75	4.37
	social skill	8	15.00	2.56	8.25	3.06
	Social competence	8	18.75	3.01	9.75	3.37
	Relationship with peers	8	5.75	2.31	2.50	1.41
Control	Total social skill	16	23.00	8.03	23.00	8.03
	social skill	16	12.56	5.32	12.56	5.32
	Social competence	16	15.06	5.16	15.06	5.16
	Relationship with peers	16	5.44	2.42	5.44	2.42

Hypothesis 1. The problem solving training by two methods of group play and group storytelling influence the sub-scale of the lack of social competence of slow learning students.

In order to investigate this hypothesis to maintain fix the effect of pre-test scores of sub-scale of lack of social competence in two experimental groups and one control group and comparing their post-test scores of the lack of social competence, the analysis of covariance was used.

Table 2: The results of covariance analysis for subscale scores of lack of social competence in two experimental group and control group.

Sources of variation	Sum of squares	DF	Mean of squares	F	Sig.
The effect of pre-test	469.600	1	469.600	104.595	0.001
The effect of group	294.102	2	147.051	32.753	0.001
Error	125.712	28			
Total	739.875	31			

The results presented in Table 2 indicate that due to the significance of the difference of the pre-test scores in sub-scale of lack of social competence ($F(1,31)=104.595$, $II<0.01$), the calculated amount of F for post-test scores of subscales of lack of social competence in two experimental and

control groups after keeping fix the pretest effect was meaningful ($F(1,31)=32.753$, $II<0.01$). As a result, there is a significant difference between the mean scores of subscales of lack of social competence of slow learning students in two experimental and control groups by stabilizing the effect of pre-test scores of social inadequacy.

Hypothesis 2. The problem solving training by two methods of group play and group storytelling influence the sub-scale of social skill of slow learning students.

In order to examine the second hypothesis to stabilize the effect of pre-test scores of sub-scale of social skill in two experimental groups and one control group and comparing their post-test scores, the analysis of covariance was used. The results presented in Table 3 show that according to the significance of the difference of the pre-test scores in sub-scale of social skill ($F(1,31)=106.292$, $II<0.01$), the calculated amount of F for post-test scores of subscales of social skill in two experimental and control groups after keeping fix the pretest effect was significant ($F(1,31)=41.921$, $II<0.01$). Accordingly, there is a significant difference between the mean scores of subscales of social skill of slow learning students in two experimental and control groups by stabilizing the effect of pre-test scores of social skill.

Table 3: The results of covariance analysis for subscale scores of social skill in two experimental group and control group.

Sources of variation	Sum of squares	DF	Mean of squares	F	Sig.
The effect of pre-test	505.223	1	505.223	106.292	0.001
The effect of group	398.519	2	199.259	41.921	0.001
Error	133.089	28			
Total	880.875	31			

Hypothesis 3. The problem solving training by two methods of group play and group storytelling influence the sub-scale of relationship with peers in slow learning students.

The analysis of covariance was used to examine the above hypothesis to stabilize the impact of pre-test scores of relationship with peers in two experimental groups and one control group and comparing their post-test scores. The results of Table 3 demonstrate that given the significance of the difference of the pre-test scores in sub-scale of relationship with peers ($F(1,31)=46.845$, $II<0.01$), the calculated amount of F for post-test scores of subscales of relationship with peers in two experimental and control groups after stabilizing the pretest effect was significant ($F(1,31)=27.875$, $II<0.01$). Therefore, there is a significant difference between the mean scores of subscales of relationship with peers in slow learning students in two experimental and control groups by stabilizing the effect of pre-test scores of relationship with peers.

Table 4: The results of covariance analysis for subscale scores of relationship with peers in two experimental group and control group

Sources of variation	Sum of squares	DF	Mean of squares	F	Sig.
The effect of pre-test	67.244	1	67.244	46.845	0.001
The effect of group	80.027	2	40.013	27.875	0.001
Error	40.193	28	1.435		
Total	197.469	31			

Discussion and conclusion

The results of examining the first hypothesis based on considering the effect of problem solving training by two methods of group play and group storytelling on sub-scale of lack of social competence of slow learning students showed a significant difference between lack of social

competence ($F=32.75$ and $P<0.01$) of slow-learning students in experimental group and control group. In other words, teaching problem solving by group storytelling and group play reduces the lack of social competence of slow-learning students in experimental group and control group. Results obtained from the study are indirectly consistent with study results of Jalali et al (2010) based on the effectiveness of group play therapy in reducing fear and increasing social adjustment of children and Souleymani Abhari (2014) on the basis of the effectiveness of narrative therapy based on social-oriented stories on increasing social skill, communication and social competence in children with behavioral disorder. Problem solving training by group play and group storytelling reduces the sense of lack of social competence of students, because problem solving training in the form of play and story by giving selection right to students and by using social type stories and social-oriented games caused the turmoil caused by the social inadequacy of students to be adjusted in the form of play and story and problem-solving training by group games and group storytelling could enhance the personal and social interaction.

The results obtained from investigating the second hypothesis on the basis of the effect of problem solving training by two methods of group play and group storytelling on sub-scale of social skill of slow learning students indicated a significant difference between the sub-scale of social skill ($F=69.83$ and $P<0.01$) of slow-learning students in experimental group and control group. In other words, problem solving training by group storytelling and group play increases the social skills of slow-learning students in experimental group. The present study results are consistent with findings of Tahmasebi (2014) and Khatam (2011) on the basis of the effect of problem solving training by game on reduction of social anxiety and enhancement of social skill as well as the findings of Barton and colleagues (2015), Wilson and Sanders (2015) and Kurabvari (2013) based on the impact of storytelling on increasing social skills of students and the study results of Bagirli and Parker (2014) concerning the effects of narrative therapy and play therapy on increasing self-control, social responsibility, expressing feelings, respect, social acceptance and improving children's social skills. Accordingly, problem-solving training by group games and group storytelling can be effective in developing the social skills of students.

Also, the third hypothesis testing results concerning the effect of problem solving training by two methods of group play and group storytelling on sub-scale of relationship with peers in slow learning students showed a meaningful difference between relationship with peers ($F=27.87$ and $P<0.01$) in slow-learning students in experimental group and control group. In other words, teaching problem solving by group storytelling and group play enhances the relationship with peers in slow-learning students in experimental group. The obtained results are in line with study results of Sheibani (2006) about the effect of problem-solving skills in the form of story on the social adaptation rate, Ashena (2013) based on the effect of teaching problem solving on increasing social adjustment rate and social communication skill in students, Soleimannejad and Soudi (2014) based on the impact of Quranic stories on the components of social skills (altruistic behavior, socially inappropriate behavior, impulsive behavior, peer relationships, domination and high self-confidence), Asghari Nekah (2011) regarding the effectiveness of puppet play therapy on communication skills of children with autism, Ansari (2014) about the evaluation of the effectiveness of play therapy on increasing the social skills of children with anxiety, and Simon (2009) regarding the comparison of the effect of problem solving intervention in play and problem solving intervention in communication and social skills of children.

In explaining the obtained results, it can be said that problem solving training by group games could enhance the personal-social interactions and these students through play adjust their behaviors with the environment. Problem solving training in the form of group storytelling in slow-

learning students caused students to be refined socially and emotionally and their individual -social links with the peer became more and stronger.

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